7
3
2
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11
4
ASSLIN
CH1
CH2
02
50
02
LightMaster
CH1

LightMaster™

The LightMaster™ lighting control system gives YOU the power to independently control circuits based on the amount of natural light in an area. Simply adjust the LightMaster™ foot-candle dials to a desired light level and instantly manage light the way you see it.

LightMaster™ is ideal for any lighting application where operation is based on natural light. The sensors can be installed in a 330-foot radius from the controller in different accessible areas, such as a rooftop or a window, for easy service access and reduced maintenance costs.

LightMaster™ also features unmatched accuracy with independent settings that enable indoor lighting to stay off until natural lighting is reduced, while outdoor lighting turns on when natural light is lost. The unique lighting control system turns lights ON during inclement weather and avoids nuisance ON/OFF switching caused from lightning or car lights. A single LightMaster™ Sensor can provide a signal for up to 20-circuits to help conserve energy and promote a safer lit area for customers and workers.

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LM2-O-882T

Kit includes LS2 Sensor

LightMaster™ Control System with Timer

LM2-O-882T

The LightMaster™ Control System with Timer operates on time as well as ambient light-level sensing. When natural light is available, the LightMaster™ will allow for this to be used, saving energy costs, and ensuring the proper amount of light is available. The LM2-O-882T provides 365-day scheduling, along with Holiday scheduling to increase energy efficiency. LightMaster™ is an affordable alternative to expensive or unreliable lighting controls. It is a cost-effective solution for providing additional light level control beyond the typical timer or photocontrol. It can be added to an existing timer. LightMaster™ offers true dusk-to-dawn operation as well as dusk-on and timed-OFF operations and can achieve additional energy savings by adjusting light levels throughout the day or night. Additionally, it offers an affordable solution for daylight harvesting. Features include a delay setting to avoid nuisance ON/OFF switching of lighting during intermittent environmental changes, such as clouds, lightning, or headlights. LightMaster™ is essential where activities are impacted by changing and inadequate light levels throughout the day. It will turn lighting ON during inclement weather and OFF when normal light levels resume. It is more reliable than photocontrols and can save maintenance costs over time.

Applications

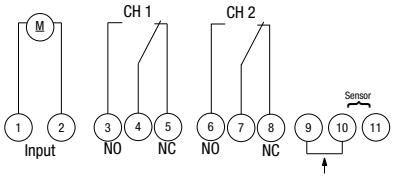
- Security lighting • Atriums • Awnings • Site lighting
- Industrial yard lighting • Perimeter lighting • Signage
- Interior/ exterior lighting

Features

- 2-circuit control unit
- Single sensor controls both circuits
- Independent light-level and time delay adjustments for each circuit
- Timer turns lighting ON/OFF as needed to maximize energy savings
- 365-day and Holiday scheduling for maximum flexibility without additional maintenance expenses
- Type 3R indoor/outdoor plastic rainproof enclosure

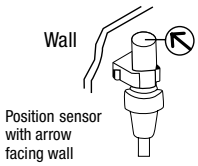
Wiring Diagrams

3-4 and 6-7 closes on light level decreasing below setpoint



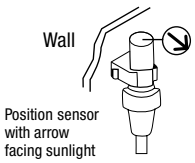
Jumper required between 9 and 10

Dusk to Dawn Control



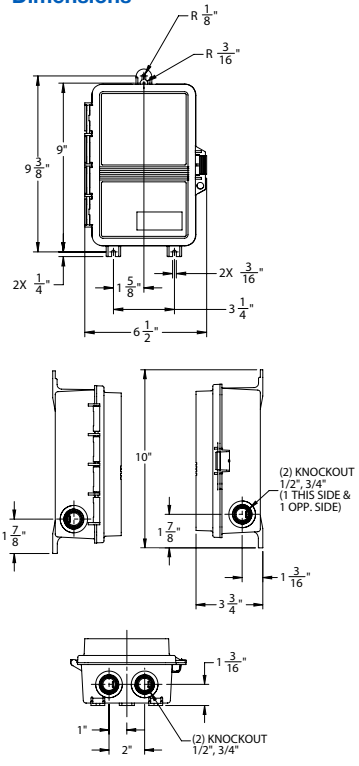
LS1 or LS2

Interior Lighting Control (Daylight Harvesting)



LS2

Dimensions



Model #	Sensor	Sensor Type	Light Intensity
LM2-O-882T	LS2	Dark	50 to 1,000 fc

For enclosure options and dimensions, see page 167.

Accessories/Replacement

Transparent Sensor 0.2 to 50 fc, Transparent Case (IP65)	LS1
Dark Sensor 50 to 1,000 fc, Dark UV Filter Case (IP65)	LS2

Ratings	
Input Voltage	120 VAC, 60 Hz
Switch Type	SPDT
Relay	SPDT "dry" contacts per circuit
Resistive	10 A, 120-277 VAC
Inductive Ballast	8 A, 120-277 VAC
Sensor Type	
LS1	Transparent Sensor 0.2 to 50 fc, Transparent case
LS2	Dark Sensor 50 to 1,000 fc, Dark UV Filter case
Sensor Time Delay	0 to 100 sec
Max Power Consumption	3 W
Operating Temperature	
Control	-4° F to 131° F (-20° C to 55° C)
Sensor	-22° F to 158° F (-30° C to 70° C)
Humidity Range	
Control	0 to 95% RH, non-condensing
Sensor	0 to 100% RH
Enclosure Dimensions H x W x D	10" x 6 ½" x 3 ¾" (254 mm x 165.1 mm x 95.3 mm)
Warranty	1-year limited

LightMaster™ Control System

LM2-O-120

The LightMaster™ Control System operates on ambient light-level sensing. When natural light is available, the LightMaster™ will allow for this to be used, saving energy costs, and ensuring the right amount of light is available. LightMaster™ is an affordable alternative to expensive or unreliable lighting controls and a cost-effective solution for providing additional light level control beyond the typical timer or photocontrol. It can be added to an existing timer. LightMaster™ offers true dusk-to-dawn operation and can achieve additional energy savings by adjusting light levels throughout the day or night. Additionally, it offers an affordable solution for daylight harvesting. The LightMaster™ features a delay setting to avoid nuisance ON/OFF switching of lighting during intermittent environmental changes, such as clouds, lightning, or headlights. The LightMaster™ is essential where activities are impacted by changing and inadequate light levels throughout the day. It will turn lighting ON during inclement weather and OFF when normal light levels resume. The LightMaster™ is more reliable than photocontrols and can provide savings on maintenance costs over time.

Applications

- Security lighting • Atriums • Awnings • Site lighting
- Industrial yard lighting • Perimeter lighting • Signage
- Interior/exterior lighting

Features

- 2-circuit control unit
- One sensor controls both circuits
- One sensor can provide a signal for up to 10 LightMaster™ control modules
- Independent light-level and time delay adjustments for each circuit
- Type 3R rainproof enclosure

Model #	Sensor	Sensor Type	Light Intensity
LM2-O-120	LS2	Dark	50 to 1,000 fc

For enclosure options and dimensions, see page 167.

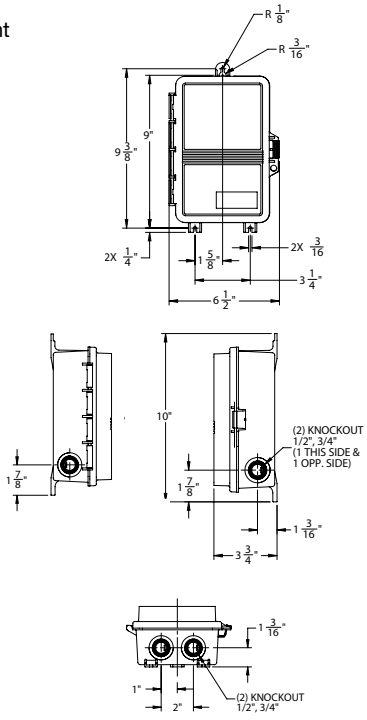
Accessories/Replacement

Transparent Sensor 0.2 to 50 fc, Transparent Case (IP65)	LS1
Dark Sensor 50 to 1,000 fc, Dark UV Filter Case (IP65)	LS2

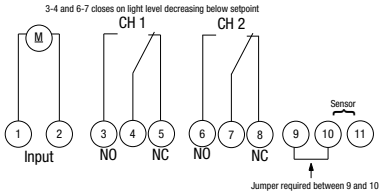
Kit includes LS2 Sensor

LM2-O-120

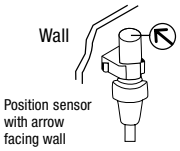
Dimensions



Wiring Diagrams

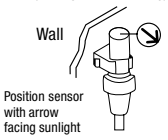


Dusk to Dawn Control



LS1 or LS2

Interior Lighting Control (Daylight Harvesting)



LS2

Ratings	
Input Voltage	120 VAC, 60 Hz
Switch Type	SPDT
Relay	SPDT "dry" contacts per circuit
Resistive	10 A, 120-277 VAC
Inductive Ballast	8 A, 120-277 VAC
Sensor Type	
LS1	Transparent sensor 0.2 to 50 fc, transparent case
LS2	Dark sensor 50 to 1,000 fc, dark UV filter case
Sensor Time Delay	0 to 100 seconds
Max Power Consumption	3 W
Operating Temperature	
Control	-4° F to 131° F (-20° C to 55° C)
Sensor	-22° F to 158° F (-30° C to 70° C)
Humidity Range	
Control	0 to 95% RH, non-condensing
Sensor	0 to 100% RH
Enclosure Dimensions H x W x D	10" x 6 ½" x 3 ¾" (254 mm x 165.1 mm x 95.3 mm)
Warranty	1-year limited

PC2-120

PC1-120

LS1 Sensor

LS2 Sensor

PC Series

LightMaster™ Control Modules with Sensor

The PC Series offers the same control features as the LightMaster™ Series, but allows for the units to easily mount onto a DIN rail for custom installations. This series comes in both 1 and 2-circuit controls, and your choice of either a transparent or dark sensor for your application needs. Up to 10 units can be combined to allow large areas of lighting to be controlled from a single LS Series sensor, reducing maintenance and installation costs.

Applications

- Security lighting • Parking lot lighting • Site lighting • Industrial yard lighting
- Perimeter lighting • Interior/exterior lighting

Features

- Transparent and dark sensor types available to accommodate your distinct light level needs
- Adjustable light-level sensitivity control
- DIN rail mountable
- 0 to 100-second adjustable sensor time delay

Ratings	
Input Voltage	120 VAC, 60 Hz
Switch Type	SPDT
Relay	SPDT "dry" contacts per circuit
Resistive	10 A, 120-277 VAC
Inductive Ballast	8 A, 120-277 VAC
Sensor Type	
LS1	Transparent sensor 0.2 to 50 fc, transparent case
LS2	Dark sensor 50 to 1,000 fc, dark UV filter case
Sensor Time Delay	0 to 100 sec
Max Power Consumption	2.5 VA
Operating Temperature	
Control	-4° F to 131° F (-20° C to 55° C)
Sensor	-22° F to 158° F (-30° C to 70° C)
Humidity Range	
Control	0 to 95% RH non-condensing
Sensor	0 to 100% RH
Dimensions	
Modules H x W x D	3 ⅜" x 2 ⅛" x 2 ⅝" (85.8 mm x 54 mm x 66.7 mm)
Sensors L x Dia	3" x 1 ¼" (76.2 mm x 31.8 mm)
Warranty	1-year limited

Model #	Circuits	Sensor	Sensor Type	Light Intensity
PC2-120-LS1	2	LS1	Transparent	0.2 to 50 fc
PC2-120-LS2	2	LS2	Dark	50 to 1,000 fc
PC1-120-LS1	1	LS1	Transparent	0.2 to 50 fc
PC1-120-LS2	1	LS2	Dark	50 to 1,000 fc

For enclosure options and dimensions, see page 167.

LightMaster™ Control Modules

LightMaster™ Accessories

Individual 1 and 2-circuit control modules are available to allow for easy expansion for the application needs. Simply add another module to allow the sensor that is already part of the system to take on additional areas of lighting control. Each module comes with independent time delay as well as light level control for each channel, ensuring that the lighting comes on only when needed, making this the ideal solution for controlling different areas of lighting with a single control device.

PC1-120

PC2-120

Features

- 1 or 2-circuit control units
- Convenient dial-style adjustment controls for ease of use
- Individual light-level adjustment per circuit
- Adjustable dials for setting foot-candle levels
- 0 to 100-second sensor time delay adjustment per circuit
- DIN rail mountable
- Use with ambient light sensors, sold separately below

Model #	Circuits
PC1-120	1
PC2-120	2

For enclosure options and dimensions, see page 167.

Ratings	
Input Voltage	120 VAC, 60 Hz
Switch Type	SPDT
Relay	SPDT "dry" contacts per circuit
Resistive	10 A, 120-277 VAC
Inductive Ballast	8 A, 120-277 VAC
Sensor Time Delay	0 to 100 seconds
Max Power Consumption	2.5 VA
Operating Temperature	
Control	-4° F to 131° F (-20° C to 55° C)
Sensor	-22° F to 158° F (-30° C to 70° C)
Humidity Range	
Control	0 to 95% RH non-condensing
Sensor	0 to 100% RH
Dimensions H x W x D	3 ⅜" x 2 ⅛" x 2 ⅝" (85.8 mm x 54 mm x 66.7 mm)
Warranty	1-year limited

Ambient Light Sensors

LightMaster™ Accessories

The LS Series Ambient Light Sensors detect the amount of natural or ambient light that is available. These sensors themselves do not perform the switching ON/OFF of the loads, allowing for them to outlast typical photocontrols. These sensors detect the amount of light that is available and provide that information to the control modules which in turn perform the switching operations. These sensors are available for both direct and indirect exposure to ambient light. Typically, the dark sensor is used for direct exposure to light, while the transparent sensor would be ideal for indirect exposure to light.

LS1 Sensor

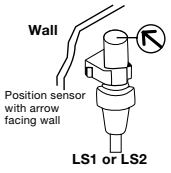
LS2 Sensor

Features

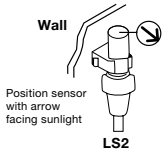
- Transparent and opaque sensors for all lighting applications
- One sensor can provide a signal for up to 10 LightMaster™ control modules
- Accurate, reliable measurement for precise foot-candle light-level settings
- IP65 cases
- 1-year limited warranty

Wiring Diagrams

Dusk-to-Dawn Control



Interior Lighting Control
(Daylight Harvesting)



Model #	Sensor	Sensor Type	Light Intensity	Mounting Type
LS1	LS1	Transparent	0.2 to 50 fc	½" Conduit Fitting
LS2	LS2	Dark	50 to 1,000 fc	½" Conduit Fitting

For ratings, see page 78.